

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 7 EXAMINATION – SUMMER -2019**Subject Code: 2270003****Date: 13-05-2019****Subject Name: Pharmaceutical Chemistry – IX (Medicinal Chemistry - III)****Time: 02:30 PM TO 05:30 PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is combinatorial chemistry? Discuss in detail about different methodologies used for synthesis? **06**
(b) Explain Hansch Linear Free Energy Relationship model in drug design? **05**
(c) Explain the Molecular modeling strategies and its applications? **05**
- Q.2** (a) Give the SAR of quinolone antibacterial? Draw the scheme of synthesis of ciprofloxacin? **06**
(b) Write a note on Computer Aided Drug Design? **05**
(c) Give the synthesis of – **05**
i) Chloramphenicol ii) Sulphacetamide
- Q.3** (a) Explain the SAR of sulfonamides? Comments on sulphonamides are not use in presence of pus? **06**
(b) Discuss in detail alkylating agents? **05**
(c) Write a short note on aminoglycoside antibiotics? **05**
- Q.4** (a) Give the method of synthesis & uses of - **06**
i) Trimethoprim ii) Norfloxacin
(b) Classify anti-HIV agents with examples and write a note on protease inhibitors? **05**
(c) Explain the SAR of Tetracyclines? **05**
- Q.5** (a) Define and classify anti-neoplastic agents with examples? Give the synthesis of Tamoxifen? **06**
(b) Discuss on the natural products used as anti-neoplastic agents? **05**
(c) Write a short note on antifungal agents? **05**
- Q. 6** (a) Define and Classify antimalarial with suitable examples of each class? Give synthesis and mode of action of chloroquine? **06**
(b) Write a short notes on Antiamoebic agents? **05**
(c) Give the synthesis of – **05**
i) Amandatine ii) Fluorouracil
- Q.7** (a) Classify antitubercular agents with examples? Explain the MOA of first line antitubercular agents? Give the scheme of synthesis of ethambutol? **06**
(b) Write the degradation of penicillin with structures? **05**
(c) Write a note on anthelmintics? **05**
